# UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TEXAS TEXARKANA DIVISION

CATHX RESEARCH LTD	§	
	§	
Plaintiff,	§	
	§	
v.	§	Case No. 5:21-cv-00077-RWS
	§	
2G ROBOTICS INC.,	§	
	§	
Defendant.		

# DEFENDANT'S MOTION TO DISMISS PLAINTIFF CATHX RESEARCH LTD.'S COMPLAINT

Defendant 2G Robotics Inc. (now known as Voyis Imaging Inc. ("Defendant")) respectfully moves this Court to dismiss Plaintiff Cathx Research Ltd.'s ("Cathx") Complaint pursuant to Federal Rule of Civil Procedure 12(b)(6) and Local Rule CV 7.

## **Statement Of Issues To Be Decided**

Does U.S. Patent No. 10,116,842 (the "'842 patent") claim patent-ineligible subject matter such that this Court should dismiss the Complaint under Federal Rule of Civil Procedure 12(b)(6)? See Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208 (2014) (setting forth the two-step framework for analyzing whether claims are patent eligible).

### **Basis For Motion To Dismiss**

The '842 patent claims are directed to the abstract idea of operating a camera and reference projection light source (*e.g.* a laser) at the same time to capture images. The elements and functions recited in the claims do not describe an inventive concept that transforms the claims into something significantly more than an abstract idea. As such, the '842 patent claims patent-ineligible subject matter requiring dismissal of the Complaint under Rule 12(b)(6).

# **TABLE OF CONTENTS**

			Page
INTR	ODUC	ΓΙΟΝ	1
THE A	ASSER'	TED PATENT	2
LEGA	L STA	NDARD	3
THE (		S OF THE '842 PATENT FAIL EACH PRONG LICE'S TWO STEP TEST	5
I.	A RE	PRESENTATIVE CLAIM ANALYSIS IS APPROPRIATE	5
II.	THE	CLAIMS FAIL STEP ONE OF THE ALICE TEST	6
	A.	The "Focus and Character" of the Claims is the Operation of a Camera and a Reference Projection Light Source at the Same Time to Capture Images	6
	В.	Analogous Cases Confirm that Claim 13 is Directed to an Abstract Idea	8
	C.	Claim 13 Merely Captures Human Activity.	9
III.		CLAIMS FAIL STEP TWO OF <i>ALICE</i> BECAUSE THEY LACK  NVENTIVE CONCEPT"	10
	A.	The Claimed Elements and Functions are Generic and Conventional	11
	B.	The Claims, as a Whole, are Unpatentable	13
IV.	NO D	ISPUTED MATERIAL FACT PREVENTS DISMISSAL	15
CONO	CLUSIC	ON .	15

# **TABLE OF AUTHORITIES**

	Page(s)
Cases	
Accenture Glob. Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336 (Fed. Cir. 2013)	4, 6
Affinity Labs of Tex., LLC v. Amazon.com, Inc., 838 F.3d 1266 (Fed. Cir. 2016)	8
Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208 (2014)	passim
Bilski v. Kappos, 561 U.S. 593 (2010)	6
Cave Consulting Grp., Inc. v. Health Care Serv. Corp., Civ. Action No. 6:17-CV-00344-RWS, 2018 WL 703247 (E.D. Tex. Feb. 5, 2018)	14
Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l. Ass'n, 776 F.3d 1343 (Fed. Cir. 2014)	5, 6
CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366 (Fed. Cir. 2011)	4
Dropbox, Inc. v. Synchronoss Techs., Inc., 815 F. App'x 529 (Fed. Cir. 2020)	7, 13
Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350 (Fed. Cir. 2016)	4, 8
FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089 (Fed. Cir. 2016)	10
Free Stream Media Corp. v. Alphonso Inc., 996 F.3d 1355 (Fed. Cir. 2021)	8
Hawk Tech. Sys., LLC, v. Castle Retail, LLC, No. 2:20-cv-02766-JPM-tmp, Dkt. 44 (W.D. Tenn. Sept. 15, 2021)	7, 13
Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363 (Fed. Cir. 2015)	9

Interval Licensing LLC v. AOL, Inc., 896 F.3d 1335 (Fed. Cir. 2018)	8
LendingTree, LLC v. Zillow, Inc., 656 F. App'x 991 (Fed. Cir. 2016)	8
P&RO Solutions Grp., Inc. v. CiM Maintenance, Inc., 273 F. Supp. 3d 699 (E.D. Tex. 2017)	12
RecogniCorp, LLC v. Nintendo Co., 855 F.3d 1322 (Fed. Cir. 2017)	4
SAP Am., Inc. v. Investpic, LLC, 898 F.3d 1161 (Fed. Cir. 2018)	4
Semantic Search Techs. LLC v. Aldo U.S., Inc., 425 F. Supp. 3d 758 (E.D. Tex. 2019)	3, 4, 5, 10
Sensormatic Elecs., LLC v. Wyze Labs, Inc., No. 2020-2320, 2021 WL 2944838 (Fed. Cir. July 14, 2021)	14
In re TLI Commc'ns LLC Pat. Litig., 823 F.3d 607 (Fed. Cir. 2016)	7, 11, 12
TriDim Innovations LLC v. Amazon.com, Inc., 207 F. Supp. 3d 1073 (N.D. Cal. 2016)	8
Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329 (Fed. Cir. 2017)	1, 7
Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709 (Fed. Cir. 2014)	5, 14
Uniloc USA, Inc. v. ADP, LLC, 772 F. App'x. 890 (Fed. Cir. 2019)	14
Yu v. Apple Inc., 1 F. 4th 1040 (Fed. Cir. 2021)	7, 8, 9, 10, 12, 15
Statutes	
35 U.S.C. § 101	6. 15

#### INTRODUCTION

The claims of U.S. Patent No. 10,116,842 ("the '842 patent") are directed to nothing more than the abstract idea of operating a camera and a reference projection light source (e.g., a laser) at the same time to capture images. Specifically, the claims recite a system and method for gathering range and 3D dimensional information of subsea objects using a camera and a reference projection light source that are synchronized, but do not sufficiently describe how to achieve the synchronization in a non-abstract way. See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329, 1337 (Fed. Cir. 2017) ("The claim requires the functional results of 'converting,' 'routing,' 'controlling,' 'monitoring,' and 'accumulating records,' but does not sufficiently describe how to achieve these results in a non-abstract way.").

When only conventional technology is used to practice an abstract idea, the claims will lack an inventive concept sufficient to transform that abstract idea into patentable subject matter. In this case, all components recited in the '842 patent claims, such as a camera and a reference projection light source (e.g., a laser), are decades-old technology that are well-known in the art. Moreover, the claims contain no saving inventive concept because there is nothing to indicate that they require anything other than ordinary functionality of a conventional camera and light source. See id. at 1341 (finding no inventive concept where "nothing in these claims requires anything other than conventional computer and network components operating according to their ordinary functions").

Because the claims are squarely directed to an abstract idea and rely on routine steps and conventional technology, the '842 patent fails the *Alice* test. Accordingly, this Court should hold the '842 patent invalid under section 101 and dismiss the Complaint with prejudice.

#### THE ASSERTED PATENT

The '842 patent purports to be directed to "an underwater method and system for gathering range and dimensional information of subsea objects . . . ." (Ex. 1, Abstract). The '842 patent has two independent claims—claim 1, a system claim, and claim 13, a method claim. The independent claims are set forth below:

- 1. An underwater survey system for gathering range and 3D dimensional information of subsea objects, the system comprising
  - a camera configured to capture images of a sub sea scene; and
  - one or more reference projection light sources configured to project one or more structured light beams the camera configured to capture a sequence of images of each of a plurality of fields of view within the scene, where each of the plurality of fields of view of the scene is illuminated by one or more of the light sources, and wherein the camera and light sources are synchronized so that each time an image is acquired, a specific configuration of light source parameters and camera parameters is used;
  - the one or more reference projection light sources having a fixed distance from the camera and a fixed orientation in relation to the camera.
- 13. A method for gathering range and 3D dimensional information of subsea objects in a system comprising a camera and one or more reference projection light sources, the method comprising the steps of:
  - the one or more reference projection light sources projecting one or more structured light beams onto an object; and
  - the camera capturing a sequence of images of each of a plurality of fields of view of the object having the one or more structured light beams projected thereon, where the object is illuminated by one or more of the light sources, wherein the camera and light sources are synchronized so that each time an image is acquired, a specific configuration of light source parameters and camera parameters is used.
- Claims 2-12 and 16-17 depend from claim 1, while claims 14 and 15 depend from claim 13. In essence, the claims recite the abstract concept of operating a camera and a reference projection light source (*e.g.*, a laser) at the same time to capture images.

While the claims include tangible components including a camera and one or more reference projection light sources, the specification includes admissions that that these items are generic and conventional in the art. Indeed, in the Background section, the inventors concede that "[t]raditional underwater imaging systems consist of a camera, a means of illumination for lighting purposes and a video system for recording and displaying the scene and to allow storage of the images for future analysis." (Ex. 1 at 1:66-2:2) (emphasis added.) In the specification, the inventors explain that a "reference projection light source[]" refers to a light source adapted to generate "a structured light beam[]," (id. at 19:4-6) where such a "structured light beam is [typically] derived from a laser," but may be derived in other ways (id. at 10:38-44). Structured light sources, such as lasers, were indisputably used in prior art underwater range finding systems. (Id. at 3:38-67 (discussing LIDAR and Time of Flight techniques that employ laser pulses for illumination of an underwater object or scene); id. at the Other Publications Section (Tetlow, S., et al., "Three-dimensional measurement of underwater work sites using structured laser light," Meas. Sci. Technol, Sep. 1999. 10(12): pp. 1162-1167) (emphasis added)). Likewise, the specification teaches that off the shelf cameras in the art may be used to practice the purported inventions. (Id. at 12:44-47 ("The cameras may be high resolution CMOS, sCMOS, EMCCD or ICCD cameras with in excess of 1 Mega pixels and typically 4 Mega pixels or more. In addition, cooled cameras or low light cameras may be used.").

#### LEGAL STANDARD

Under Federal Rule of Civil Procedure 12(b)(6), "a court must dismiss a complaint that does not state a claim for relief that is 'plausible on its face." *Semantic Search Techs. LLC v. Aldo U.S., Inc.*, 425 F. Supp. 3d 758, 768 (E.D. Tex. 2019) (J. Schroeder III) (*quoting Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (internal citations omitted)). To state a plausible claim, "plaintiffs

must plead facts sufficient to allow a court to draw a reasonable inference that defendants are liable ...." *Id.* at 769.

"Issues of patent-eligible subject matter are questions of law...." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1369 (Fed. Cir. 2011). This threshold issue "may be, and frequently has been, resolved on a Rule 12(b)(6) or (c) motion" before formal claim construction or fact discovery, where there are no relevant factual disputes. *SAP Am., Inc. v. Investpic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018). This Court routinely decides patent ineligibility at the pleadings stage. *See, e.g., Semantic Search Techs.*, 425 F. Supp. 3d at 769, 778.

The Supreme Court has provided a two-step framework for determining patent eligibility. *Alice Corp. Pty. Ltd.*, 573 U.S. at 217-218. In the first-step inquiry, the court must "identify and define whatever fundamental concept appears wrapped up in the claim," *Accenture Glob. Servs.*, *GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013), and in turn, the "focus," "basic thrust", or "character" of the claim must be assessed in light of the specification. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Courts often consider whether the claims focus on a "specific implementation of a solution to a problem"—"a specific means or method for improving technology"—or instead use a computer "merely as a tool" to perform an abstract idea. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326-27 (Fed. Cir. 2017) (internal quotations and citations omitted).

The second-step inquiry focuses on whether the other claim elements, individually or collectively, add "significantly more" to the abstract idea that is "sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221. Implementing an abstract idea with "well-understood, routine, or conventional" activities does not suffice. *Id.* at 225. To meet *Alice's* second step, the claim elements must evident an "inventive concept." *Elec.* 

Power Grp., 830 F.3d at 1353. A patent may not meet the § 101 standard if "the concept embodied by the majority of the limitations describes [ ] an abstract idea." See Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 715 (Fed. Cir. 2014).

# THE CLAIMS OF THE '842 PATENT FAIL EACH PRONG OF *ALICE'S* TWO STEP TEST

#### I. A REPRESENTATIVE CLAIM ANALYSIS IS APPROPRIATE

A court can determine that all claims of a patent are patent-ineligible under the *Alice* test where, as in this case, one analyzed claim is representative of the rest. *See, e.g., Alice,* 573 U.S. at 225-26. All of the claims of the '842 patent "recite little more than the same abstract idea" of operating a camera and a reference projection light source (*e.g.,* a laser) at the same time to capture images that is confined to utilizing "well-known, routine, and conventional" technology. *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l. Ass'n,* 776 F.3d 1343, 1348-49 (Fed. Cir. 2014). Independent claim 13 sets forth a method for achieving that abstract idea. Likewise, independent claim 1 is directed to a similarly configured system for operating a camera and a reference projection light source (*e.g.,* a laser) at the same time to capture images. Both claims are directed to the same concept of capturing images using a camera and a reference projection light source that are synchronized and should be treated similarly for purposes of patent eligibility. *See, e.g., Semantic Search Techs.,* 425 F. Supp. 3d at 772-773 (finding the other claims at issue to be substantially similar to representative claims).

The dependent claims fare no better, as each is linked to the *same* abstract idea and further specify the nature of the well-known components of the independent claims (*e.g.*, type or number of camera, light source, or light beam, as in claims 2, 3, 9, 12, orientation of the structured light beams and camera, as in claims 7, 8, 10, 11, 14, 16, and 17) or simply add insignificant pre- or post-solution activity to that abstract idea (*e.g.*, analyzing the captured images or adjusting imaging

or lighting parameters, as in claims 4-6, 14 and 15). See, e.g., Content Extraction & Transmission LLC, 776 F.3d at 1348. Such window-dressing cannot confer independent patent eligibility where there was none to begin with. See, e.g., Bilski v. Kappos, 561 U.S. 593, 610-11 (2010) (holding that the "prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.") (internal quotations omitted). For example, dependent claim 15 adds the steps of illuminating the object to be surveyed with an illumination source, capturing an image of the illuminated object with the camera, and superimposing the two captured images to form an augmented output image.

Put simply, claims that address "only minor differences in terminology but require performance of the same basic process," and "should rise or fall together." *Accenture Glob. Servs.*, *GmbH*, 728 F.3d at 1344 (internal citations and quotations omitted). Adding additional well-known components and/or insignificant activity, as do the dependent claims, does not make the concept underlying the claims any less abstract or demonstrate some an inventive concept. Therefore, a finding that claim 13 is unpatentable under 35 U.S.C. § 101 should extend to all of the other claims—both independent and dependent—of the asserted patent.<sup>1</sup>

#### II. THE CLAIMS FAIL STEP ONE OF THE *ALICE* TEST

# A. The "Focus and Character" of the Claims Is the Operation of a Camera and a Reference Projection Light Source at the Same Time to Capture Images

When stripped of the generic technical jargon, claim 13 is laid bare as directed to nothing more than the abstract idea of the operating of a camera and a reference projection light source (e.g., a laser) at the same time to capture images. Such concepts have been routinely held to be

<sup>&</sup>lt;sup>1</sup> Should Cathx separately argue the patentability of any other claim, Defendant reserves the right to address such claim in its reply brief.

abstract ideas. *See, e.g., Yu v. Apple Inc.*, 1 F. 4th 1040, 1043 (Fed. Cir. 2021) ("taking two pictures (which may be at different exposures) and using one picture to enhance the other in some way" is an abstract idea); *Dropbox, Inc. v. Synchronoss Techs., Inc.*, 815 F. App'x 529, 535 (Fed. Cir. 2020) (finding claims reciting to the synchronization of operations to be directed to an abstract idea); *In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 610 (Fed. Cir. 2016) (affirming district court's lower court's decision in which it concluded that "taking, organizing, classifying, and storing photographs" is directed to an abstract idea).

In conducting the step-one analysis, courts must look to "what the patent asserts to be the focus of the claimed advance over the prior art." Yu, 1 F.4th at 1043 (quoting TecSec, Inc. v. Adobe Inc., 978 F.3d 1278, 1929 (Fed. Cir. 2020)). In allowing these claims, the Applicant emphasized that the purported claimed advance over the prior art is the synchronization function, i.e., the limitation "wherein the camera and light sources are synchronized so that each time an image is acquired, a specific configuration of light source parameters and camera parameters is used..." (Ex. 2 at 7, 9.) Such result-based functional language, however, fails to "describe how to achieve these results in a non-abstract way." See Two-Way Media Ltd., 874 F.3d at 1337 (finding claims directed to "converting, routing, controlling, monitoring, and "accumulating records," were patentineligible where they recite "generic functional language to achieve [the] purported solutions" without specifying "how the desired result is achieved.") (internal citations omitted); Hawk Tech. Sys., LLC, v. Castle Retail, LLC, No. 2:20-cv-02766-JPM-tmp, Dkt. 44 at 9 (W.D. Tenn. Sept. 15, 2021) (Ex. 3) ("the manipulation of temporal and spatial parameters of the video files without additional concrete guidance would be a claim directed to an abstract idea under step one of Alice.") (emphasis added).

Claims like those of the '842 patent are directed to an abstract idea under *Alice* because they do not include details on "how to engineer or program" the components in a non-abstract way.

Interval Licensing LLC v. AOL, Inc., 896 F.3d 1335, 1345 (Fed. Cir. 2018); see also Free Stream Media Corp. v. Alphonso Inc., 996 F.3d 1355, 1363-64 (Fed. Cir. 2021) ("The asserted claims provide for how [the functional result] is achieved only by stating that the mechanism used to achieve [it] is by piercing or otherwise overcoming a mobile device's security sandbox. But the asserted claims do not at all describe how that result is achieved."). Rather, the plain language of the claims are only defined in terms of their generic functions. See TriDim Innovations LLC v. Amazon.com, Inc., 207 F. Supp. 3d 1073, 1080 (N.D. Cal. 2016) ("Much like the unpatentable subject matter in TLI Communications, the claims in question here are defined only in terms of their functions...") (citing In re TLI, 823 F.3d at 613). Such claims reciting "result-based" functional elements and "uses of existing computers as tools in aid of processes focused on 'abstract ideas'" are not patent-eligible. *Interval Licensing*, 896 F.3d at 1343-44; *Affinity Labs of* Tex., LLC v. Amazon.com, Inc., 838 F.3d 1266, 1269 (Fed. Cir. 2016) ("The purely functional nature of the claim confirms that it is directed to an abstract idea...."); Elec. Power Grp., 830 F.3d at 1354 (claims at issue recited ineligible subject matter because they provided no "particular ...inventive technology for performing those functions.").

# B. Analogous Cases Confirm that Claim 13 is Directed to an Abstract Idea

The Federal Circuit has instructed courts to look at factually similar cases to help assess whether a claimed concept is an abstract idea. *See LendingTree, LLC v. Zillow, Inc.*, 656 F. App'x 991, 995 (Fed. Cir. 2016). Applying that logic here, the Federal Circuit recently found a similar concept, a digital camera that captures two digital images and produces an enhanced image, to be an abstract idea and invalid under § 101. *Yu*, 1 F. 4th at 1043. In *Yu*, the Federal Circuit concluded that this abstract idea—using multiple pictures to enhance each other— "has been known by photographers for over a century." 1 F. 4th at 1043. This is strikingly similar to the abstract concept captured by claim 13 of the '842 patent in this case. Just as photographers have been

using multiple pictures to enhance each other for many years, so too have underwater systems used a camera and lasers to capture images. (*See, e.g.*, Ex. 1, '842 patent at 1:66-2:7 ("Traditional underwater imaging systems consist of a camera, a means of illumination for lighting purposes and a video system for recording and displaying the scene and to allow storage of the images for future analysis"); *Id.* at Other Publications (Tetlow, S., et al., "Three-dimensional measurement of underwater work sites using *structured laser light*," Meas. Sci. Technol, Sep. 1999. 10(12): pp. 1162-1167) (emphasis added)).

In conducting the step one analysis, the *Yu* court concluded that the recitation of physical components, two image sensors, two lenses, analog-to-digital converting circuitry, image memory, and a digital image processor – all conventional components – does not indicate that the claims were directed to a patent eligible application of the underlying abstract idea. *Id.* at 1043. So too, the recitation of a camera and reference projection light sources in claim 13 of the '842 patent does not mean that the claims are directed to patent eligible subject matter. Furthermore, in *Yu*, the Court rejected the contention that the claims provided a specific solution to problems in the art that made them patent eligible because the claimed solution was "the abstract idea itself—to take one image and 'enhance' it with another." *Id.* at 1044. Similarly, the claimed solution of claim 13 of the '842 patent is the abstract idea itself— operation of a camera and a reference projection light source at the same time to capture images. In the end, the claims in this case suffer from the same deficiencies as the claims in *Yu*, warranting the same finding here.

#### C. Claim 13 Merely Captures Human Activity.

Claim 13 also fails step one of *Alice* because it captures a concept that merely mimics human activity, such concepts that the Federal Circuit has long held abstract. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) ("[T]racking financial transactions to determine whether they exceed a pre-set spending limit (i.e., budgeting)" is an

abstract idea because it "involve[s] methods of organizing human activity."); *Semantic Search*, 425 F. Supp. 3d at 775-76 (claims are directed to an abstract idea at *Alice* step one when the claimed idea "represents routine tasks that could be performed by a human.") (internal citations and quotation omitted). Claim 13's concept of operating a camera and a reference projection light source at the same time to capture images can be achieved by a diver operating a camera and a light source at the same time. Indeed, the '842 patent even concedes that the alleged inventions here were grounded in human activity. (*See* Ex. 1 1:35-36 ("Conventionally, the majority of survey and inspection work would have been the preserve of divers"); *Id.* at 1:31-34 (noting that "[o]ptical inspection...by human observation" is traditionally used to determine the health and status of deep sea oil drilling platforms). In conducting such a survey, the diver can determine the brightness of light source, its orientation in relation to the object, and other parameters as the diver sees fit. Thus, the claims "merely implement an old practice in a new environment." *FairWarning IP, LLC v. latric Sys., Inc.*, 839 F.3d 1089, 1094 (Fed. Cir. 2016). Because claim 13 is directed to activity that can be and has been performed by humans, it is directed to an abstract idea.

\* \* \*

In sum, representative claim 13 fails *Alice* Step One because it is directed to an abstract idea.

# III. THE CLAIMS FAIL STEP TWO OF ALICE BECAUSE THEY LACK AN "INVENTIVE CONCEPT"

The claims of the '842 patent also fail to satisfy the second prong of *Alice* because they lack any "inventive concept." *Alice*, 573 U.S. at 221. Representative claim 13 recites conventional technologies, including cameras and structured light sources, in their most generic forms to perform standard functions to achieve the gathering of range and 3D dimensional data—nothing that presents an improvement on a technological process. *Yu*, 1 F.4th at 1045 (finding no inventive

concept behind the abstract idea of image enhancement because the "claimed configuration does not add sufficient substance to the underlying abstract idea of enhancement—the generic hardware limitations of claim 1 merely serve as 'a conduit for the abstract idea'") Such well-known technologies merely provide a "generic environment" in which to execute the abstract idea; this does not make the idea patentable. *See In re TLI*, 823 F.3d at 611.

The claims also fail the second step of the *Alice* analysis because they recite traditional technologies to accomplish merely conventional steps. Under the second prong of *Alice*, the Court "must examine the elements of the claim[s] to determine whether [they] contain[] an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (internal citations and quotations omitted). The inclusion of claim components or functions described in "purely functional and generic" terms do not impart patent-eligibility. *Id*. at 226.

#### A. The Claimed Elements and Functions are Generic and Conventional

The lack of improvement embodied by the claims is underscored by the conventional nature of the claimed components. The claims of the '842 patent recite no more than a set of generic prior art items—cameras and reference projection light sources—to achieve the abstract idea to which the claims are directed. None of the claims, understood in light of the specification, require anything other than off-the-shelf, conventional components. Indeed, the specification of the '842 patent describes that using a camera and various means for illumination were known in the art. (*See, e.g.*, Ex. 1, at 1:66-2:2 ("[t]raditional underwater imaging systems consist of a camera, a means of illumination for lighting purposes ....").) As to the camera, the specification describes that traditional cameras known in the art may be used. (*Id.* at 12:44-47 ("The cameras may be high resolution CMOS, sCMOS, EMCCD or ICCD cameras with in excess of 1 Mega pixels and typically 4 Mega pixels or more. In addition, cooled cameras or low light cameras may

be used."). Likewise, the specification teaches that structured light sources such as lasers have been used in traditional underwater range finding applications. (*Id.* at 3:38-67.)

Mere recitation of well-known components that are used to execute an abstract idea is insufficient to confer patent eligibility to the abstract idea. See Yu, 1 F.4th at 1045 ("[c]onventional computer equipment can be 'vital' to an advance that is still abstract, but not suffice to avoid ineligibility at Alice step two"); see also In re TLI, 823 F.3d at 614 (finding generic computer components "insufficient to add an inventive concept to an otherwise abstract idea."); P&RO Solutions Grp., Inc. v. CiM Maintenance, Inc., 273 F. Supp. 3d 699, 710 (E.D. Tex. 2017) (J., Schroeder III) (finding that generic components do not provide an inventive concept). In Yu, even though the claims included a number of physical components of the digital camera, the claims failed the Alice step-two analysis because these components were conventional in the art. Yu, 1 F. 4th at 1045. Like those claims, the claims of the '842 patent only recite conventional components that "perform only their basic functions...and are set forth at a high degree of generality." Id. at 1043.

Furthermore, each of the recited components here is used for nothing more than its well-known, conventional purpose. Based on the admissions in the Background section of the '842 patent, there can be little dispute that using a camera to capture images of an object and using reference projection light sources to illuminate an object and to project structured light beams on it are conventional uses of those components in the art. Where hardware components are used for their purely functional and generic use, no inventive concept is imparted. *See, e.g., In re TLI*, 823 F.3d at 615 (holding that "vague, functional descriptions of server components are insufficient to transform the abstract idea into a patent-eligible invention").

The result-based functional language of the claims that the "camera and light sources are synchronized so that each time an image is acquired, a specific configuration of light source parameters and camera parameters is used" is insufficient to provide any inventive step here. See Dropbox, 815 F. App'x at 535 ("[t]o claim a technological solution to a technological problem, the patent must actually *claim the technological solution*. Neither a single session ID associating between the two connections nor a synchronizer synchronizing the operation amount to a nonabstract improvement—that is, a technological solution."). The "specific configuration of ... parameters" do not provide a specific implementation of a technological improvement sufficient to impart an inventive concept, but instead is directed to the abstract idea itself of using a camera and a light source together. Hawk Tech. Sys. Inc., 2:20-cv-02766-JPM-tmp, at 10 ("The parameters and frame rate, considering how they are defined in the claims and specification, similarly, do not appear to be more than manipulating data (in this case, images) in such a way that has been found to be abstract.") (citing Intellectual Ventures ILLC, 850 F.3d at 1341 ("Rather, the claims recite . . . a series of generic computer 'components' that merely restate their individual functions—i.e., organizing, mapping, identifying, defining, detecting, and modifying. That is to say, they merely describe the functions of the abstract idea itself, without particularity.")).

In summary, the claims are directed to abstract ideas and recite nothing beyond generic technologies performing their routine and conventional functions. The generic recitation of synchronization of the camera and light sources, without more, cannot impart a technological improvement that warrants a finding of an inventive concept. Accordingly, the claims fail to transform their underlying abstract idea into patent eligible subject matter.

#### B. The Claims, as a Whole, are Unpatentable

Even when their elements are analyzed as "an ordered combination," the claims do not recite patent-eligible subject matter. After all, the claims only call for operation of a camera and

a reference projection light source at the same time to capture images using well-known and conventional components, *i.e.*, cameras and structured light sources. "There is nothing unconventional about the ordered combination that is not merely the sum of the parts." *Uniloc USA, Inc. v. ADP, LLC*, 772 F. App'x. 890, 900 (Fed. Cir. 2019) (internal quotations omitted); *see also Ultramercial*, 772 F.3d at 716 (holding that even the combination of eleven steps does not transform the nature of the claim when they do nothing more than recite routine, conventional activity). But that is exactly what is at issue here: systems and methods for capturing images that implement routine technology pursuant to their well-known functions.

Nor can the synchronization concept support an inventive concept where the claims in practice do not amount to "significantly more than a patent upon the ineligible concept itself." Alice, 573 U.S. at 218 (internal citations and quotations omitted); Cave Consulting Grp., Inc. v. Health Care Serv. Corp., Civ. Action No. 6:17-CV-00344-RWS, 2018 WL 703247 at \*3 (E.D. Tex. Feb. 5, 2018) (agreeing with Magistrate Judge's analysis that "any novelty over the prior art does not in and of itself change the fact that the claim as a whole and its limitations are wellunderstood, routine, conventional activities used to determine physician efficiency scores.. "). As discussed above in Section III. A., the components specified by the claims for the synchronization step are nothing more than conventional features that are performing according to their customary functions that cannot impart an inventive concept. "Providing generic devices that communicate with each other, however, is a conventional application of an abstract idea." Sensormatic Elecs., LLC v. Wyze Labs, Inc., No. 2020-2320, 2021 WL 2944838, at \*3 (Fed. Cir. July 14, 2021) (Federal Circuit affirming judgment that claim directed to a surveillance system for wireless communication between components was did not recite an inventive concept). Therefore, even when taken as a whole, the claims do not impart an inventive concept.

### IV. NO DISPUTED MATERIAL FACT PREVENTS DISMISSAL

There are no material facts in dispute that would preclude the Court from granting this Motion. See Yu, 1 F.4th at 1043-46 (affirming dismissal at the pleadings stage where it was undisputed that the components of the claims were well-known, conventional, and performed only their basic functions). The Complaint does not allege that the '842 patent claims more than abstract ideas under step one of Alice. Likewise, the Complaint fails to include any factual allegations regarding whether the '842 patent satisfies step two of Alice.

#### CONCLUSION

For the reasons set forth above, this Court should grant Defendant's motion to dismiss the Complaint because the '842 patent fails to satisfy 35 U.S.C. § 101.

Dated: September 21, 2021

# Respectfully submitted,

## By: JACKSON WALKER LLP

# /s/ Arthur Gollwitzer III

(by permission of lead counsel)
Arthur Gollwitzer III
Texas State Bar No. 24073336
agollwitzer@jw.com
100 Congress Avenue, Suite 1100
Austin, Texas 78701
(512) 236-2000 – Phone
(512) 236-2002 – Fax

# BENESCH, FRIEDLANDER, COPLAN & ARONOFF LLP

Mircea A Tipescu (Lead Attorney) (admitted *pro hac vice*)
Manish K. Mehta (to be admitted *pro hac vice*)
71 South Wacker Drive, Suite 1600
Chicago, IL 60606
Telephone: 312.212.4949
Facsimile: 312.757.9192

Email: mtipescu@beneschlaw.com Email: mmehta@beneschlaw.com

Attorneys for Defendant 2G Robotics Inc.

#### **Certificate of Service**

I, Arthur Gollwitzer III, an attorney of record in this matter, hereby certify that on September 21, 2021, I electronically filed the following document:

## Defendant's Motion to Dismiss Plaintiff Cathx Research LTD.'s Complaint

with the Clerk of the United States District Court for the Eastern District of Texas, Texarkana Division, using the CM/ECF system, which will send notification and a copy of this filing to all counsel of record.

Lance Lee wlancelee@gmail.com
Attorney at Law
5511 Plaza Dr.
Texarkana, Texas 75503

Edward L. Bishop (pro hac vice)
<a href="mailto:ebishop@bdl-iplaw.com">ebishop@bdl-iplaw.com</a>
Stephanie N. White (pro hac vice)
<a href="mailto:swhite@bdl-iplaw.com">swhite@bdl-iplaw.com</a>
Bishop Diehl & Lee, Ltd.

1475 E. Woodfield Rd., Ste. 800
Schaumburg, IL 60173

/s/ Arthur Gollwitzer III
Arthur Gollwitzer III